

Title (en)
ATOM TRANSFER RADICAL POLYMERIZATION PROCESS

Title (de)
VERFAHREN ZUR ATOM TRANSFER RADICAL POLYMERIZATION

Title (fr)
PROCEDE DE POLYMERISATION RADICALAIRE PAR TRANSFERT D'ATOME

Publication
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Application
EP 05724749 A 20050307

Priority
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Abstract (en)
[origin: WO2005087819A1] Embodiments of the polymerization process of the present invention are directed to polymerizing free radically polymerizable monomers in the presence of a polymerization medium initially comprising at least one transition metal catalyst and an atom transfer radical polymerization initiator. The polymerization medium may additionally comprise a reducing agent. The reducing agent may be added initially or during the polymerization process in a continuous or intermittent manner. The polymerization process may further comprise reacting the reducing agent with at least one of the transition metal catalyst in an oxidized state and a compound comprising a radically transferable atom or group to form a compound that does not participate significantly in control of the polymerization process. Embodiments of the present invention comprise reacting a reducing agent with at least one of catalyst in an oxidized state and a compound comprising a radically transferable atom or group to initiate and/or maintain catalytic activity throughout the polymerization process.

IPC 8 full level
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Citation (search report)
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